Trends

The test scores shown in this chart are the 4th grade reading scores, which are derived from the Spring 2000 tests, given to a total of 36,379 4th grade Orange County students, of which 11,236 or 30.8%, were English Language Learners (ELL). Countywide, the average 4th grade reading score for all 4th grade students was in the 51st percentile, while ELL students scored on average in the 21st percentile. The statewide average for all 444,623 4th grade students, including 121,682 (27.4%) ELL students who took the test, was in the 45th percentile.

Summary

As these charts show, the relationships among academic achievement, ELL status, and poverty are complex. They are also highly relevant to an assessment of the conditions of Orange County children, because 30.3% of the County's students are ELL and 37.03% are eligible for free and reduced lunches (FRL). FRL is considered the best available current indicator of children in or near poverty. With one third of the students in the County being identified as ELL or living in poverty, understanding the relationship among these characteristics is one important way of understanding what contributes to student achievement as measured by test scores. At the same time, the significant correlation between ELL status, poverty, and test scores raises the question of which factors may be causes and which may be effects. Poverty may correlate negatively with achievement because it is associated with family instability, or because it may correlate with parents who work more than full-time, which reduces the time for homework supervision and reading to children. In addition, as some of the data suggest, student and family poverty may also correlate with school districts that lack the funding to fully match state funds for reduced class sizes in elementary grades.

ACADEMIC ACHIEVEMENT: CAUSES AND EFFECTS

Research on students' academic achievement also points to the importance of family involvement, teacher quality, and teachers' practice as contributors to test scores and other measures of academic performance. Earlier research, concluding that family factors explained most of the differences between academic achievement in different schools, has been updated by more detailed analysis of schools' practices and resources. This updated analysis suggests that academic achievement differentials may result in part from differences in the resources available to schools, including both fiscal resources and experienced teachers.[1] Some of these factors are affected by the level of poverty and percent of ELL students in the district, such as the tendency of teachers with emergency credentials to be concentrated in the districts with the largest percentages of ELL and lower-income students as indicated by data at the school level. A number of studies note the strong connection between schools serving large populations of low income students and the employment of teachers that are not fully credentialed. Orange County schools demonstrate this connection as well. Across Orange County elementary schools during the 1998/99 academic year, an analysis of the percentage of teachers not holding full teaching credentials and the percentage of students qualifying for FRL, showed an almost perfect correlation (.902, which was significant at the .01 level). Hence, the least qualified teachers as measured by credentialing, are teaching at schools with the neediest students.

Implications

If improvement of academic performance is seen as one of the most important issues affecting the conditions of children in Orange County, continuing efforts must be made to determine which factors are most likely to result in such improvements. Further research is needed at the County, district, and school level into the connections among the six major factors discussed in this section: academic achievement, poverty, language diversity, family involvement, schools' resources, and teacher quality and practices.

A further implication of the importance of poverty and language diversity in assessing academic achievement is the need to compare “apples to apples,” i.e. to recognize that comparisons are inappropriate between districts and schools with upper-income student populations and those that are relatively disadvantaged. While many successful programs have shown that all children can achieve, regardless of their poverty or ethnicity, if they have access to good instruction in a safe and student-centered environment, recognizing that students may start at very different points is essential in assessing both students and schools fairly. A school with 92% of its students eligible for FRL faces very different challenges than one with 8% of its students eligible, and test scores will reflect some of those differences.

The Academic Performance Index (API) is a California-specific attempt to include the non-educational factors to produce a "Second Score" that includes a school's aggregate API score to be compared with similar schools. This index was produced for the first time in the 1998/99 school year.

Finally, it should be noted that within the clear correlation across *all* of the schools, there are some impressive performers *within* each cluster of schools. Some schools with substantial poverty or ELL percentages are achieving significantly higher test scores than other schools with similar rates of poverty and ELL. So it may be important for parents and community leaders to assess what other factors may be producing these variances - parent involvement, community agencies' support, teaching methods, stability of leadership, or other factors.